SUNSET CHOIR

by Realitone

A note for the blind and visually impaired

Our goal was to make this instrument as accessible as possible, so we designed our NKS knob implementation with that in mind. Currently, the values of NKS knobs can be read when using Reaper with OSARA, as well as Pro Tools via FlowTools. In any other DAW, such as in Logic Pro, only the name of the knob is announced. This is a known NKS limitation.

We have a separate NKS guide, since Sunset Choir can be controlled **entirely** through NKS. However, if something is problematic (the unlock code may be a problem, for instance), please reach out to us at support@realitone.com and we will do what we can to solve whatever issue you may be having. Your input will help us improve our instruments for future customers.

Note for users of the LITE version:

The following topics do not apply to Sunset Choir LITE:
- Microphone Positions (there is only one option in LITE)
- The RHYTHMIC articulation category
- Scripted Legato

A Quick Overview

Elements

You'll notice 4 labels surrounding the window in the center - **Attack**, **Top Layer**, **Release**, and **Bottom Layer**. You can activate an element by clicking on its label, which will bring up a Menu bar displaying the name of the currently active articulation. A basic visual representation will also appear in the Activity Window in the center of the interface.
Clicking a Menu Bar will bring up a list of performance categories and their corresponding articulations for you to choose from. The Top Layer and Bottom Layer menus contain the same lists of articulations, while the Attack and Release menus have their own unique options.

The instrument will play even if only the Attack is selected, or if only the Top or Bottom Layer are selected. It will not play, however, if only the Release is selected. So what to do if you want only a Release? Select a Top or Bottom Layer - ideally with a slow/gentle attack - then play really short notes. Presto! You'll only hear the release.

Playing a sound

For each note you play, the elements are triggered from left to right.
If you have an Attack element enabled, then the attack will always play first, before crossfading into the Bottom and Top Layers, which will hold until you release the note. The Release element is triggered when you release the note.

This provides a new way of approaching sampled performances, offering greater control over the "Ins and Outs" of a note or chord, as well as coming up with creative and unique combinations of playing techniques.

Activity ("Portal") Window

The Activity Window gives a graphical representation of the articulations you have selected, as well as visual feedback of when each element is triggered and Modwheel activity.

Microphone Positions

This instrument ended up being so big that we couldn't fit all the mic positions into a single instrument. Really! This is literally a Kontakt limitation we hadn't expected. Therefore, we've split them up into two instrument options:

The default "Sunset Choir" instrument uses a "Mixed" perspective, which is premixed from all of the mics we had available from the session. There is no mixing necessary when using this.

Additionally, there is a second instrument "Sunset Choir Ultimate - Mics" that offers a "close" and "far" perspective as two separate channels, ready for you to dial in your preferred mix.

Personally, I always use the default ("Mixed") nki. If you do the same, note that if you want to save some hard drive space (the full set is 113GB … yikes!), you can delete the FAR and CLOSE nkx/nkc files in your Samples folder. (Obviously save them as backups somewhere else.)

Articulation Categories

SUSTAINS

The **Sustains** type is made up of articulations that loop for as long as you hold down the notes. These subcategories are pretty self-explanatory, but the main difference is that the **EXTENDED** sustains are the slightly unusual, performative sustains that lend themselves to building textures and movement.

EVOLVES are straight sustains that smoothly morph back and forth between two distinct vowels or shapes.

ATONAL means there is no centered pitch, so it's designed more for creating atmospheres or using as a base for sound design. Throwing these samples into some elaborate effects chains is a great way to design spooky drones and other-wordly atmospheres!

REPETITIONS

Selecting any articulation from the "Repetitions" category will present you with a "DENSITY" knob, which appears when a Repetition is selected. This determines the frequency in which those articulations are triggered, or "repeated".

Note that because of how the repetitions "engine" works, the Speed/Density cannot be different for the Top and Bottom Layers.

RHYTHMIC

Here's a fun one! These are special articulations that let YOU decide the rhythm! Selecting from this category will display a "grid" of dots. These dots represent 16th notes (semiquavers) over 4 beats.

The phrases are built from 3 syllables - 2 short, 1 long. Consecutive dots will alternate between short syllables from the chosen articulation, but dots that are followed by rings (empty dots) will trigger and hold the long syllable.

Let's use an example… If the chosen articulation is "Tickitah", the resulting performance will sound like:

Ti cki ti cki | Taahhh | Ti cki tahh | taahhh |
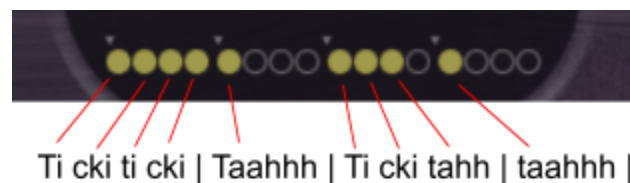
LEGATO

There are 3 types of legato:

- True Legato - Monophonic (one note at a time), with real interval samples triggered between notes. Overlap notes as you play, to trigger legato.

- Scripted - A mode that fakes the transitions between notes. This allows for legato-style playing on articulations that don't include real transitions, such as the Extended sustains.

- Polyphonic - Uses real transition samples like True Legato, but allows you to play chords! This is a Release-Based legato, which means that when you release notes, then Sunset Choir waits a defined amount of time (set in milliseconds with the "Release Window" knob), then any new notes that are played within that window of time will be played as legato notes, as opposed to "new" notes.

  Note that there is a little more latency when using this mode, since the computer code to wait until the Release Window amount of time expires before it can actually release those notes and play the new ones.

  There are two advantages to this polyphonic legato method. FIrst is that it's easier to play, since you don't have to twist your hands into knots, trying to play overlapping notes for more than one legato note.

  The other advantage is you can play different numbers of notes! For instance, play a 3-note chord, release all three notes (or even just one or two notes), then play 4 or 5 or 6 new notes. No problem! Our scripting intelligently figures out how to make transitions so it will sound good. I'm particularly proud of this.

- Note that for True Legato and for Polyphonic Legato, there is a "Sample Offset" knob (and slider), so you can make the legato transition a bit shorter, essentially making the legato "quicker." This is only for the mp and Forte options, though, since we obviously don't want to cut into the Slow and Very Slow legatos.

Modwheel Behavior
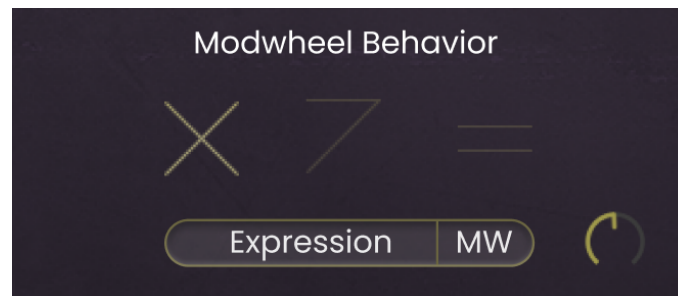
The primary function of the Modwheel is to control the blend between the Top Layer and Bottom Layer. There are 3 options for how this is achieved, selectable from the Modwheel Behavior section:

1. " X "
A standard crossfade – The Bottom Layer will fade into the Top Layer as you increase the Modwheel (CC1). In other words, with Modwheel at 0, you will only hear the Bottom Layer. With Modwheel at 127 (the very top) you will only hear the Top Layer. By holding modhweel at 50%, you will hear both layers equally.
2. " 7 "
Only the Top Layer will fade in and out (following the Modwheel), while the Bottom layer stays at a consistent volume. In effect, this is like fading in the Top Layer "over the top" of the Bottom Layer.

3. " = "

Equal volume – Both Top and Bottom Layers stay at full volume. This essentially disables any sort of blending between layers.

Note that if you only have one Layer active (either Top or Bottom), then "Layer Blend" is automatically disabled, and the Modwheel will only control Expression (if enabled).

Expression

Okay, pay attention boys and girls, because this is trickier than you may think... Expression can be controlled by CC11, *OR* it can be controlled by the Mod Wheel, or it can be off completely. Let's explain them in ascending order of difficulty:

Off Completely. This is easy. Just turn off the Expression Button.

Controlled by CC11. This is also pretty easy. Turn on Expression, and make sure the secondary button to the right says "CC11". There! Now the volume of your instrument will follow your MIDI CC11 control

Controlled by Mod Wheel. Click the secondary button until it says "MW". Presto! Expression is now automatically controlled by the mod wheel, along with your fade settings.
But … there's something you need to know:

A new knob will appear when Expression is set to Modwheel. This knob acts like a "strength" value for how much the expression is affected by the mod wheel. This is because we know you don't want it to go silent at the bottom of the MW, right? Well, just make sure the knob is set somewhere closer to the middle to avoid the extreme volume changes at each end.

To clarify: If the Strength knob is at 0, then the Mod Wheel has **no Expression** at all. If the Expression Knob is all the way up, then the mod wheel will make the instrument really quiet when the mod wheel is down.

Presets

Factory Presets

Use the menu in the top half of the presets section to browse through our "factory presets". You can click the preset name to open the full list, or simply click either arrow to cycle through the list one by one.

User Presets

In the lower half, we have the USER PRESETS section. This is where you can click on any of the plus (+) buttons to store your instrument's current configuration. Once a user preset is added, you can click that same button to recall it, or a better idea is …

Creating a User Preset will automatically add a yellow "Preset" key to your keyswitches section of the keyboard. (If you have assigned them to Octave 0 or Octave 5, as explained below.) So now you can play this keyswitch to recall your preset.

For example, maybe you'll use the consonants to make "syllables", so you could have one syllable ("Heave") on the D5 keyswitch and a second syllable ("Ho") on the E5 keyswitch. Not just words, but for any variations you want to make in the middle of a song/cue, this is where the User Presets come in handy.

To delete a User Preset, simply click the "X" that appears at the top-right of the preset button.

Settings Tabs

Two settings tabs are found at the bottom of the interface.
You can open the Element Controls by clicking the Tab/Button on the LEFT, or the Keyboard
Mapping panel by clicking the < 🎹 > button on the RIGHT.
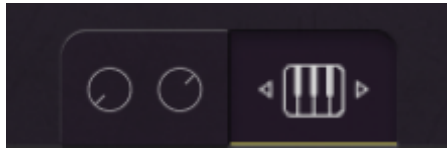
Each button will display a panel of controls. To close a panel, you can either click the tab again,
or click just outside of the panel (for example, just above the top-right edge of the panel
pop-up.

Element Controls

The first This button open a panel of controls specific to each Element, including Volume, Pitch,
Attack, and Release. This lets you dial in your own balance between elements if you feel they
are not blending how you'd like, adjust the pitch (up to 2 octaves!) for auto-harmonization, and
adjust the envelope for a softer attack or lingering release, etc.
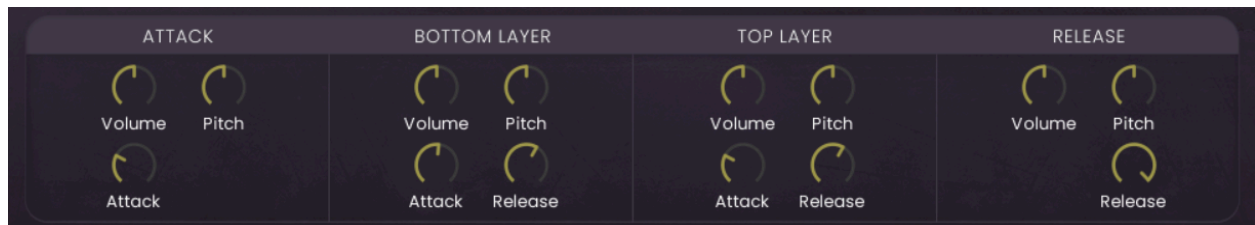
Keyboard Mapping

Playable Ranges
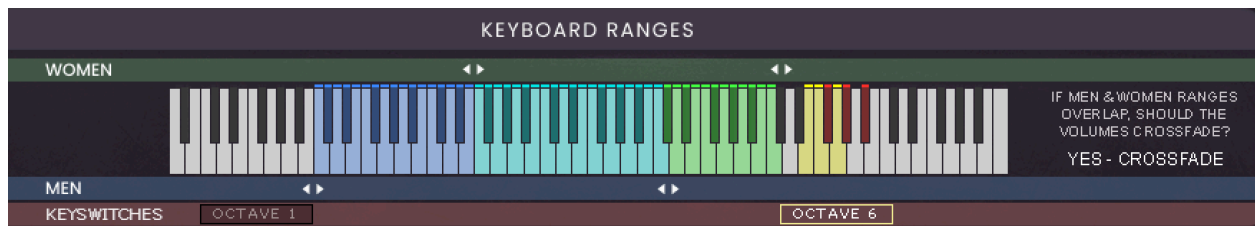
You can customize the playable ranges of the Men and Women ensembles by dragging the
handles left or right.
The Women's range is adjusted by the handles along the **TOP** of the keyboard, and represented
by the **GREEN** keys.

The Men's range is adjusted by the handles **UNDERNEATH** the keyboard, and represented by the
DARK BLUE keys.

The CYAN keys in the middle of the range represent where the ensembles overlap. You will hear both the Men and Women samples when playing these keys.

Note that the playable ranges have been stretched beyond the recorded range. If you'd like to limit the range to the natural, recorded range of the singers to avoid any artificially stretched samples, you can use the following ranges as a guide:

	Stretched Range	Natural Range
Men	C1 - C4	C1 - G3
Women	C2 - C5	F2 - A4

To the right of the keyboard is the **Range Crossfade** option. Enabling this will crossfade the volumes of each ensemble as they overlap. In other words, the Men will get quieter as their notes go higher, while the Women will get louder. This helps with balance when both ensembles are enabled at the same time.

KEYSWITCHES

These can be assigned (by simply clicking the buttons) to Octave 0, to Octave 6, or Off completely.

The YELLOW keys on the keyboard mapper represent the User Preset keyswitches. They allow you to quickly recall any of your preset configurations without having to click the interface. This means you can use it to keyswitch between articulations or combinations within a single MIDI channel in your DAW.

The RED keyswitches turn the Attack and Release on or off, so you can have better control over when they actually play. These keyswitches work like this:
Gb - Turns ON the Attack
Ab - Turns OFF both the Attack and Release
Bb - Turns ON the Release